

MOTORING FROM THE MEDICAL VIEWPOINT

The Automobile Is Not Suited to Every Person's Physique.

BENEFIT IS NOT FOR ALL.

Physical and Nervous Conditions Are Such That a Prescription Is Advisable.

Automobile, although perhaps a supplement to vehicles of this type is not the ideal place to say so, is not for all persons. There are folk to whom it is a benefit which could be got in no other way. To others again a ride for any length of time, unless on very smooth roads and very moderately undertaken, positively is harmful. This isn't to say that a doctor's advice or permission should be got before an automobile is purchased, but it should be remembered that even those whose income sets no bar sometimes perform go automobileless.

It is the duty of persons who feel malaise and distress after extended trips to discover whether the cause lies in automobile. The disinclination to walking exercise, to which the possession of an automobile predisposes, is something that may be responsible for the feeling of discomfort. In the early days of motoring having a car did not mean freedom from walking by a whole lot, but by now the machine has grown out of many of its early faults. The reasonable man, however, who is in good health, gets return in fresh air while motoring enough to offset the lack of exercise.

There are some doctors who say that exercise is overdone, that enough can be got in brief walks to take one through the day. They characterize much of the present system of exercise as overexercise. If that is so, motorists need not fear they are riding too much. However, it is well to remember that where one man gets robust and healthy on continuous riding another may get thoroughly sick.

Moderation is a good bet any time she starts and this applies to motoring, too. Some, however, moderately fast and moderately far and then isn't likely to result. That the prevalence of motoring has made a difference in the health conditions of many cannot be denied, because as an altogether new form of transit and a much more rapid one than used in the streets it has had its certain effect on human systems.

As they are readily adaptable to all conditions it has taken only the brief lifetime of motoring to bring about a new generation as well accustomed to motoring as if that method of locomotion had been known and used for a much longer time.

Some doctors have been outspoken in condemning automobiles as helping to create new nerve sufferers and those who were affected by over strain. Others have said the benefit far outweighs any bad results there might be and so were enthusiastic in favor of the motor car. As one doctor put it: "It is like many kinds of medicines; in moderate doses it has little or no possibility of injury to the strong or well, but according to individual conditions it may be very beneficial or the opposite to those who are delicate."

Neurasthenia is a thing of which a great deal has been heard of late in this country. "For average neurasthenics," says a doctor, "a beneficial effect can be predicted with a great deal of certainty under the following conditions: When riding at moderate speed they obtain great benefit from the constant effort at maintaining equilibrium from the muscular effort per se from the necessary fact that they are induced to breathe more deeply and also for the reason that the exercise is in the open air. For the average neurasthenic moderate speed reduces fear to a minimum and the tolerable degree of risk gives to the mind that agreeable titillation pertaining to all unusual experiences. Position in the car often determines whether such slight avoidable risks will be a curative stimulant or a depressant for the patient. For such a person on the back seat and an approaching vehicle may be an object of terror, whereas if the patient sat in front the ease of passage would at once be evident."

Careless or hasty driving, bumping about and hitting rough spots at speed are found to have an unpleasant effect on those whose constitutions for any reason are not of the most sound. It is not recommended to those who don't feel in top notch condition to essay a sudden tour, for instance. The pace is too swift for weak stomachs.

Most nervous persons are self-centered and from their ailment are shut in," continues this authority. "Since the motor car opens a wide field of view they will be susceptible of new impressions forced on their minds as they ride through the city or country in the life of themselves and their mood. Lastly, if the person is so circumstanced that he can drive the car himself there is a peculiar compensatory combination of impressions created. A new interest is born in connection with the operation of the machine, and he is diverted from the constant contemplation of his ailment by the unusual interest in the meaning of every new sound of the engine and by its infinite capacity for being adjusted."

The strain of driving is generally counterbalanced by the exhilaration of the conquest of the small difficulties encountered at the start, while the consciousness of ability to cope with some of the things tends in all but the advanced cases of nervousness to arouse the doctor's confidence. That accomplished

the man is himself again and the doctor has become a useless luxury.

Quite so, but there is on the other hand a type of nervous person so impatient of tempo that he cannot contain himself long enough to settle down to the effort of attempting to adjust automobile machinery. No little mechanical ability lies in that a mishap on the road will redouble his nervousness and make him even unhappier than before.

The first condition that must be insisted on in order that motoring may be a proper amusement for any one, ill or well, is that the speed must be moderate. This is not so much a term as at first might appear. With a light car speeds much over twenty miles an hour bring out most of the objectionable factors that do not appear with a heavier car until a speed of about thirty to thirty-five miles is reached. The heavier car is so much steadier that the impression conveyed to the senses is much the same as from the lower speed in the lighter car.

Motion through the air at a rate faster than our wont gives rise to a sense of exhilaration, which stimulates circulation from its mental effect and also from mechanical stimulation of the nerves on the surface of the body. So long as this is the effect that rate of speed is salutary, but when that point is passed it becomes injurious.

"The pressure of the wind rises rapidly after a speed as I have mentioned are passed, and respiration becomes more difficult. All grades of exhaustion may result, and it is possible to dilate the heart. Another injurious factor appears now, fear. If in spite of a sense of exhilaration fear of the possibilities of accident begins to form in the mind, there is developed one of the most potent causes of depression of the heart, with the result that exhaustion instead of exaltation will be the result of the trip.

"The former agreeable succession of objects now becomes a series of disappointed impressions before the eyes, and they indulge in a constant struggle with the unsatisfactory. As the eye really sees only in the brain, a tired brain comes home with a tired body."

"At moderate speeds the readjustments necessary to neutralize the motion of the car constitute a very good form of exercise, but if a moderate speed is exceeded every muscle becomes overstrained. It is familiar to all of us that in the pressure of anything that implies extreme effort from a prima donna's struggle for a high note to the athlete's muscular tension in lifting a great weight we are apt to put our own muscles into a sort of sympathetic tension. No one familiar with high motor speeds will fail to notice his own heightened muscular tension in sympathy with that of the chauffeur or with the thrust of the engine."

"I have said that motoring is like a medication and should be the subject of a prescription if it is to be taken by those who are ill. Medicines have an ordinary dose, but extraordinary ailments may demand extraordinary dosage, and the analogy still holds. Speed does blot out all but the present and there are intense sufferers whose functional ailments, vertigo and pains, both mental and physical, are blotted out by flights through the air at a rate which renders analysis of impressions so futile that all attempts at interpretation are abandoned, consequently these persons give themselves up to an indescribable but pleasurable sensation."

KNIGHT'S INSPIRATION.

Sleeve Motor Not a Result of Trained Engineering Mind.

Invention is dominated by men of minds trained along certain defined lines, but there are nevertheless instances of inspirational invention, such, for instance, as the success that has come to Charles Y. Knight for his gas motor. Knight inherited a longing to invent. His father, now active, though 74 years old, invented an important valving for steam engines and travelled the entire country changing over existing installations and making them very much more efficient. All steam prime movers are today valved as the elder Knight worked out.

It might be said that Charles Y. Knight is that accidental type of inventor of which Darius Grease is fiction's example. His mind was not then trained in engineering and his inventions were flights of romantic fancy, encouraged in the hope of a great name and a large reward. With patents Mr. Knight had a varied experience. He conceived a method of recording sales and another of supplying market information speedily. He learned of patent protection and the possibilities of patent litigation from each.

Long apprenticeship in the newspaper business would not seem to fit a man for the invention of a mechanical device having to do with mechanics, chemistry and explosive gases, but the great virtue of patience Mr. Knight did acquire. Hired as a reporter on a little weekly in Dakota, Mr. Knight was soon required to set his own type. In an emergency he was also delegated to kick the press, and to pay himself he was forced to solicit advertising and make collections.

It was while Mr. Knight was editing a dairy journal in Chicago that he became interested in motors. The automobile that he drove was as noisy as it was unreliable. With a falling motor and while quietly coasting down hill, the charm of quiet travel first came to him. He set himself to the task of evolving a quiet motor. He did not seek silence merely by contrast. He sought actual silence.

If the little balky car that Knight drove on that hot summer afternoon had not failed to perform the world might now be denied his motor invention.

Mr. Knight interested J. B. Kilbourne, a successful business man of Chicago, in his ambition. Kilbourne proved not only continuously sympathetic but uncompromising of the heavy money demands that were made upon his resources. He stood to lose \$150,000 before the tide turned and royalties flowed in.

The first Knight motor was built not with the idea that it would be a success but merely as it was hoped that it would supply information on certain fundamentals of the proposed design. It was therefore a great surprise when it was found that his first motor was successful beyond anticipation.

Exhibiting Glidden Trophy.

Among the attractions of the Maxwell place in the Garden is the Glidden trophy, which was won by a team of three Maxwell "specials" in the national reliability contest from New York to Jacksonville, Fla.

Those who have seen this trophy during its travels about the country will hardly recognize it now. After several weeks in the hands of gold and silver smiths it has taken on a new appearance of freshness and beauty.

Stearns

THE ULTIMATE CAR (KNIGHT TYPE MOTOR)

Since the adoption
of the Knight Type
Sleeve Valve
Motor, orders for
Stearns Cars have
increased 100 per
cent over last year
---and the Knight
Type Motor is used
exclusively.



BUICK 32 HORSE-POWER TOURING CAR.